

This listing of claims will replace all prior versions, and listing of claims in the application:

Listing of claims:

5 Claim 1 (currently amended) A process for stabilizing a coffee aroma-providing component against loss or degradation of desirable flavor or sensory characteristics of its aroma during storage ~~characterized in that~~ comprising contacting the aroma-providing component is ~~contacted~~ with a stabilizing agent in a manner such that the stabilizing agent is provided in an amount effective to chemically interact with undesirable compounds associated with the aroma-providing component to form a stabilized coffee aroma-providing component which: (a) retains a
10 significant portion of one or more of the desirable flavor or sensory characteristics of the coffee aroma in the coffee aroma-providing component during storage, or (b) reduces off flavor generation during storage of the coffee aroma-providing component, and wherein the stabilized coffee aroma-providing component is essentially free of the stabilizing agent when a food or beverage product containing a coffee aroma from the coffee aroma-providing agent is prepared
15 for consumption.

 Claim 2 (currently amended) The process of claim 1, ~~characterised in that~~ wherein the stabilizing agent is removed from the stabilized coffee aroma-providing component prior to ~~adding the~~ addition of the stabilized coffee aroma-providing component to a food or beverage product.

20 Claim 3 (currently amended) The process of claim 2, ~~characterised in that~~ wherein the stabilizing agent is removed from the stabilized coffee aroma-providing component by a process selected from the group consisting of distillation, fractionation, precipitation, sublimation, ion-exchange, liquid-liquid extraction (organic or aqueous), aqueous liquid-oil extraction, oil-
aqueous liquid extraction, chromatographic separation, ~~or~~ and stripping.

25 Claim 4 (currently amended) The process of claim 3, ~~characterised in that~~ comprising packing a column is packed with the stabilizing agent and passing the coffee aroma-providing agent ~~is passed~~ through the column to stabilize the coffee aroma-providing component.

Claim 5 (currently amended) The process of claim 3, ~~characterised in that~~ comprising contacting the coffee aroma-providing agent contacts with the stabilizing agent to form a mixture, passing the mixture is passed through a stripping column, optionally under vacuum, and collecting the stabilized coffee aroma-providing component is collected in a form where it is free of the stabilizing agent.

Claim 6 (currently amended) The process of claim 3, ~~characterised in that~~ comprising contacting the aroma-providing agent contacts with the stabilizing agent to form a mixture, passing the mixture is passed through a liquid-liquid extraction column using coffee oil or another an oil solvent as an extraction medium, and collecting the stabilized aroma-providing component is collected in a form where it is free of the stabilizing agent.

Claim 7 (currently amended) The process of claim 1, ~~characterised in that~~ comprising preparing the stabilized coffee aroma-providing component is prepared by incorporating the stabilizing agent into a material which is added to the coffee aroma-providing component during storage but which material is separable or removable from the coffee aroma-providing component, ~~or the coffee aroma-providing component is separable from the material,~~ before preparation for consumption of a food or beverage product therefrom.

Claim 8 (currently amended) The process of claim 1, ~~characterised in that~~ comprising forming the stabilized coffee aroma-providing component is formed by contacting the coffee aroma-providing component with a material that contains the stabilizing agent followed by separating the stabilized coffee aroma-providing component from the material.

Claim 9 (currently amended) The process of claim 8, ~~characterised in that~~ wherein the material that contains the stabilizing agent is associated with a container for packaging or storing the coffee aroma-providing component prior to use of the component for preparing a food or beverage product.

Claim 10 (currently amended) The process of ~~any preceding claim 1,~~ characterised in that wherein the coffee aroma-providing component is treated with a stabilizing agent that interacts with compounds associated with the coffee aroma-providing component to improve or

preserve the coffee aroma compounds that can improve the desirable flavor and sensory characteristics of the coffee aroma component and to reduce the amount of compounds that are associated with the undesirable characteristics.

Claim 11 (currently amended) The process of claim 1, ~~characterised in that~~
5 comprising forming the stabilized coffee aroma-providing component ~~is formed~~ by incorporating the stabilizing agent into a material which is added to the coffee aroma-providing component during storage and ~~which further comprises~~ separating the stabilized component from the material when a product for consumption is prepared.

Claim 12 (currently amended) The process of claim 1, ~~characterised in that~~
10 comprising forming the stabilized coffee aroma-providing component ~~is formed~~ by contacting a material that is processed to form the coffee aroma-providing component with the stabilizing agent, and followed by separating the stabilized coffee aroma-providing component from the material.

Claim 13 (currently amended) The process of claim 12, ~~characterised in that~~
15 wherein the stabilizing agent is added to coffee beans prior to or during roasting, quenching, cooling, or extracting of the beans to generate or isolate an improved coffee aroma.

Claim 14 (currently amended) The process of ~~any preceding claim 1~~, ~~characterised~~
~~in that~~ wherein the stabilizing agent is a compound that contains at least one atom having at least one lone pair of electrons and is present in an amount sufficient to react with some of the
20 undesirable reactive compounds associated with the coffee aroma-providing component to reduce some of the undesirable compounds, or to generate or preserve one or more coffee aroma compounds that contribute to the desirable flavor or sensory characteristics of the coffee aroma or that mask off flavors in the coffee aroma-providing component.

Claim 15 (currently amended) The process of claim 14, ~~characterised in that~~
25 wherein the undesirable reactive compounds contain carbonyl groups and the stabilizing agent complexes such compounds to form adducts that are separable from the coffee aroma, resulting in a reduced level of carbonyls in the stabilized coffee aroma-providing component, or the

undesirable compounds generate or comprise free radicals and the stabilizing agent is present in an amount sufficient to reduce generation of or scavenge such free radicals so that the coffee aroma component is stabilized and preserved.

Claim 16 (currently amended) The process of claim 14, ~~characterised in that~~
5 wherein the stabilizing agent cleaves compounds containing disulfide bonds to generate or regenerate thiols that contribute to the desirable flavor and sensory characteristics of the coffee aroma-providing component.

Claim 17 (currently amended) The process of ~~any preceding claim 1, characterised~~
~~in that~~ wherein the stabilizing agent is a compound that contains at least one atom selected from
10 the group consisting of sulfur, nitrogen, oxygen ~~or~~ and carbon with at least one lone pair of electrons and is used in an amount of between about 1 and 50,000 ppm.

Claim 18 (currently amended) The process of ~~any preceding claim 1, characterised~~
~~in that~~ wherein the stabilizing agent is a sulfite or a substance that contains or generates a
component selected from the group consisting of a sulfite, a thiol, an amine, an amino acid, or
15 peptide and is used in an amount of between about 1 and 50,000 ppm.

Claim 19 (currently amended) The process of claim 18, ~~characterised in that~~
wherein the stabilizing agent comprises an agent selected from the group consisting of a sulfite,
cysteine ~~and~~ or glutathione ~~or~~ and their salts ~~or~~ and materials containing such, or an enzyme
present in an amount sufficient to react with carbonyls associated with the coffee aroma-
20 providing component.

Claim 20 (currently amended) The process of claim 18, ~~characterised in that~~
wherein the stabilizing agent comprises an agent selected from the group consisting of a sulfite,
cysteine ~~or~~ and glutathione ~~or~~ and their salts ~~or~~ and materials containing such and they are
present in an amount sufficient to exhibit sufficient reducing power to scavenge free radicals and
25 to preserve sulfur aroma compounds in the coffee aroma-providing component from oxidative degradation.

Claim 21 (currently amended) The process of claim 1, ~~characterised in that~~
comprising associating the stabilizing agent ~~is associated~~ with another additive that acts as a
carrier for the stabilizing agent, wherein the carrier is selected from the group consisting of a
solvent, an oil, an emulsion, a flavoring agent, a carbohydrate, a protein, and ~~or~~ an antioxidant.

5 Claim 22 (currently amended) The process of ~~any preceding claim 1~~, ~~characterised~~
~~in that~~ wherein the stabilizing agent is present in an amount sufficient to react with at least some
~~or all~~ of the carbonyl groups present in compounds associated with the coffee aroma to generate
or regenerate thiols or to reduce or inhibit degradation of thiols in the coffee aroma, thus
retaining the desirable flavor or sensory characteristics of the coffee aroma during at least two
10 months of storage of the coffee aroma.

Claim 23 (currently amended) The process of claim 1, ~~characterised in that~~
wherein the stabilized aroma-providing component is a liquid ~~that optionally includes a coffee~~
~~aroma carrier, or the stabilized coffee aroma providing component and~~ is dried to a powder and
is stored until a later time when it is reconstituted for consumption by the addition of a liquid.

15 Claim 24 (currently amended) The process of ~~any preceding claim 1~~, ~~characterised~~
~~in that it further comprises~~ comprising combining the stabilized coffee aroma-providing
component with a food-forming or beverage-forming ingredient and a liquid to form a liquid
food or beverage product, and drying the liquid product by spray-drying or freeze-drying to
obtain a solid material that retains the initial flavor or sensory characteristic of the coffee aroma
20 for a time period of at least two months during storage of the solid material.

Claim 25 (currently amended) A packaged food or beverage product ~~in the form of~~
comprising a package that contains therein a stabilized coffee aroma-providing component
having preserved or improved desirable flavor or sensory characteristics and being present in an
amount sufficient to provide or impart its flavor or sensory characteristics to the product,
25 ~~characterised in that~~ the coffee aroma-providing component is stabilized with a stabilizing agent
that is immobilized in, upon or within the package or upon or within a carrier placed upon or
within or forming part of the container such that the stabilizing agent is separable or removable

from the coffee aroma-providing component, ~~or the coffee aroma providing component is~~
~~separable from the stabilizing agent~~ before preparation for consumption of the food or beverage
product, ~~wherein~~ the food or beverage product is essentially free of the stabilizing agent and
~~further wherein~~ the loss or degradation of the desirable flavor or sensory characteristics of the
5 stabilized coffee aroma-providing component are reduced or prevented such that the coffee
aroma-providing component retains its desirable flavor or sensory characteristics during an
extended periods of storage at room temperatures.

Claim 26 (currently amended) The product of claim 25, ~~characterised in that~~
wherein the stabilizing agent is immobilized onto ion-exchange resins and the resins are placed
10 within, attached to or formed as part of the container for the aroma-providing component.

Claim 27 (currently amended) The product of claim 25 ~~or 26~~, ~~characterised in that~~
wherein the stabilizer is immobilized onto or within an insoluble matrix which is contacted with
the coffee aroma-providing component and subsequently separated from the stabilized coffee
aroma-providing component.

Claim 28 (currently amended) The product of ~~any one of claims~~ claim 25-27,
~~characterised in that~~ wherein the stabilizing agent is confined in a pouch made of a semi-
15 permeable material that contains the stabilizing agent, and the pouch is placed within, attached to
or forms part of the container.

Claim 29 (currently amended) The product of claim 28, ~~characterised in that~~
20 wherein the stabilizing agent is solution that is retained in the pouch and the semi-permeable
pouch is made of a material that allows carbonyls to permeate therethrough so that they are able
to bind with the stabilizing agent and become at least partly confined within the pouch rather
than in the coffee aroma-providing component.

Claim 30 (currently amended) The product of claim 26, ~~characterised in that~~
25 wherein the coffee aroma providing component has a ~~one of the following features~~ feature
selected from the group consisting of: (a) a ratio of acetaldehyde to methanethiol that is 200 or
less during storage over several months at room temperature; (b) an acetaldehyde concentration

of 30 to 90ppm after stabilization of a coffee aroma providing component that initially contains 150ppm acetaldehyde or more; ~~or~~ and (c) an acetaldehyde concentration of 20 to 60ppm after stabilization of a coffee aroma providing component that initially contains 80 to 100ppm acetaldehyde.

5 Claim 31 (currently amended) The product of ~~any of claims claim~~ claim 25-30, ~~characterised in that~~ wherein a food or beverage product or a food-forming or beverage-forming ingredient is provided in the package along with the coffee aroma-providing agent.

 Claim 32 (currently amended) The product of ~~any of claims~~ claim 25-31, ~~characterised in that~~ wherein the stabilizing agent is present in an amount sufficient to adduct
10 carbonyls in the coffee aroma, remove or reduce carbonyls from the coffee aroma, or reduce the degradation of thiols in the coffee aroma.

 Claim 33 (currently amended) The product of ~~any of claims~~ claim 25-32, ~~characterised in that~~ wherein the coffee aroma has an initial concentration of acetaldehyde of between about 40 to 2000 ppm but a concentration of acetaldehyde after stabilization of about 1
15 to 100 ppm wherein the acetaldehyde concentration is reduced by at least 50% during stabilization.

 Claim 34 (currently amended) Stabilised coffee aroma-providing components having enhanced and/or preserved flavour or sensory characteristics, ~~characterized in that the~~ comprising a characteristic chosen from the group consisting of: a ratio of acetaldehyde to
20 methanethiol that is less than 200;~~;~~ ~~or~~ and at least 30% of the initial amount of acetaldehyde components are removed;~~;~~ ~~or~~ and at least 50% of the initial methanethiol amount is preserved during the period of storage.

 Claim 35 (currently amended) The stabilized coffee aroma-providing components according to claim 34, ~~characterized in that~~ wherein the ratio is maintained, ~~and that the initial~~
25 ~~methanethiol amount is preserved~~, during storage over several months at room temperature.

Claim 36 (currently amended) The stabilized coffee aroma-providing components according to claim 34, ~~characterized in that it~~ wherein the components are is provided in a form selected from the group consisting of a gaseous, liquid, or and solid form.

Claim 37 (currently amended) The stabilized coffee aroma-providing components according to claim 34, ~~characterized in that it is provided~~ wherein the components are provided in a liquid form and further spray-dried or freeze-dried.

Claim 38 (currently amended) The stabilized coffee aroma-providing components according to claim 34, ~~characterized in that it~~ wherein the component is incorporated in a ~~matrix of oil, water, or other solvents~~ solvent, provided as an emulsion, encapsulated in edible materials, frozen as a frost, or dried to powder from.

Claim 39 (currently amended) A beverage product comprising ~~the~~ a stabilized coffee aroma-providing component having enhanced and/or preserved flavour or sensory characteristics comprising a characteristic chosen from the group consisting of: a ratio of acetaldehyde to methanethiol that is less than 200; at least 30% of the initial amount of acetaldehyde components are removed; and at least 50% of the initial methanethiol amount is preserved during the period of storage ~~components as defined by claim 34.~~

Claim 40 (currently amended) A coffee beverage comprising the stabilized coffee aroma-providing components having enhanced and/or preserved flavour or sensory characteristics comprising a feature chosen from the group consisting of ratio of acetaldehyde to methanethiol that is less than 200 and at least 30% of the initial amount of acetaldehyde components are moved, and at least 50% of the initial methanethiol amount is preserved during the period of storage ~~as defined by claim 34.~~

Claim 41 (new) The process of claim 3, comprising contacting the aroma-providing agent with the stabilizing agent to form a mixture, the mixture is passed through a liquid-liquid extraction column using coffee oil as an extraction medium, and collecting the stabilized aroma-providing component in a form where it is free of the stabilizing agent.

Claim 42 (new) The process of claim 1, comprising preparing the stabilized coffee
aroma-providing component by incorporating the stabilizing agent into a material which is added
to the coffee aroma-providing component during storage, the coffee aroma-providing component
being separable from the material before preparation for consumption of a food or beverage
5 product therefrom.

Claim 43 (new) The product of claim 27, wherein the coffee aroma-providing
component is separable from the stabilizing agent before preparation for consumption of the food
or beverage product.

Claim 44 (new) The process of claim 1, wherein the stabilized aroma-providing
10 component is a liquid that includes a coffee aroma carrier and is dried to a powder and is stored
until a later time when it is reconstituted for consumption by the addition of a liquid.

Claim 45 (new) The stabilized coffee aroma-providing components according to
claim 34, wherein the initial methanethiol amount is preserved, during storage over several
months at room temperature.